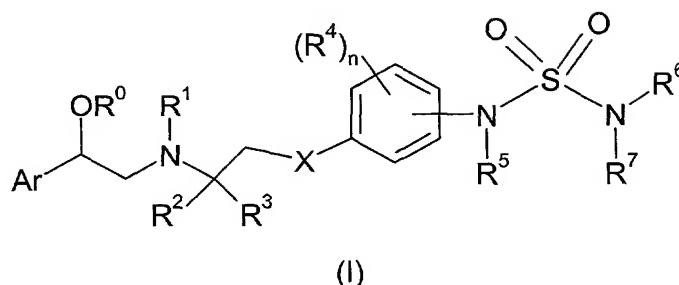


CLAIMS

What is claimed is:

1. A compound of Formula (I)



wherein

Ar is an unsubstituted or substituted aryl, or an unsubstituted or substituted heteroaryl;

R⁰ is H, a hydroxy-protecting group, or taken together with R¹ forms a five membered ring;

R¹ is H, (C₁-C₆)alkyl, an amino-protecting group, or taken together with R⁰ forms a five membered ring;

R², R³ and R⁵ are each independently H or (C₁-C₆)alkyl;

X is a covalent bond, O, S(O)_p, where p is 0, 1 or 2, or NR^{1a}, where R^{1a} is H or (C₁-C₆)alkyl;

R⁴ for each occurrence is independently halo, unsubstituted or substituted (C₁-C₆)alkyl, cyano, or unsubstituted or substituted (C₁-C₆)alkoxy;

n is 0, 1, 2, or 3; and

R⁶ and R⁷ are independently H, substituted or unsubstituted (C₁-C₆)alkyl, a substituted or unsubstituted, partially or fully saturated (C₃-C₈)cycloalkyl, a substituted or unsubstituted, partially or fully saturated (C₃-C₈)heterocyclic ring, a substituted or unsubstituted aryl, a substituted or unsubstituted heteroaryl, or R⁶ and R⁷ taken together form a substituted or unsubstituted, partially or fully saturated, heterocyclic 3 to 8 membered ring;

a prodrug thereof; or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

2. The compound of Claim 1 wherein R^1 , R^4 and R^5 are hydrogen; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

3. The compound of Claim 2 wherein Ar is pyridyl; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

4. The compound of Claim 3 wherein said pyridyl is 3-pyridyl; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

5. The compound of Claim 4 wherein R^2 and R^3 are hydrogen; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

6. The compound of Claim 4 wherein R^2 and R^3 are methyl; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

7. The compound of Claim 4 wherein X is a covalent bond; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

8. The compound of Claim 4 wherein X is an oxygen; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

9. The compound of Claim 5 wherein X is a covalent bond; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

10. The compound of Claim 5 wherein X is an oxygen; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

5

11. The compound of Claim 6 wherein X is a covalent bond; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

10

12. The compound of Claim 2 wherein said Ar is a substituted phenyl, said substituted phenyl being a halogen substituted phenyl; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

15

13. The compound of Claim 12 wherein said halogen substituted phenyl is 3-chlorophenyl; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

20

14. The compound of Claim 13 wherein X is a covalent bond; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

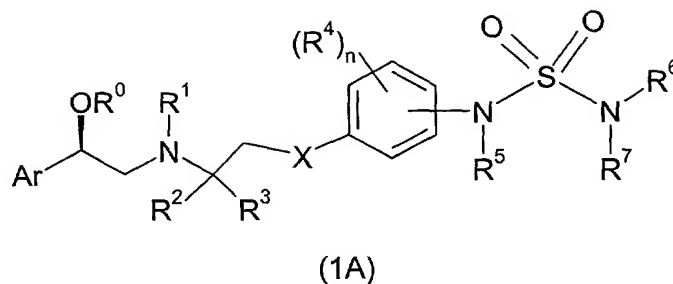
25

15. The compound of Claim 13 wherein R^2 and R^3 are hydrogen; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

30

16. The compound of Claim 14 wherein R^2 and R^3 are hydrogen; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

17. A compound of Formula (IA)



wherein

Ar is an unsubstituted or substituted aryl, or an unsubstituted or substituted heteroaryl;

R⁰ is H, a hydroxy-protecting group, or taken together with R¹ forms a five membered ring;

R¹ is H, (C₁-C₆)alkyl, an amino-protecting group, or taken together with R⁰ forms a five membered ring;

R², R³ and R⁵ are each independently H or (C₁-C₆)alkyl;

X is a covalent bond, O, S(O)_p, where p is 0, 1 or 2, or NR^{1a}, where R^{1a} is H or (C₁-C₆)alkyl;

R⁴ for each occurrence is independently halo, unsubstituted or substituted (C₁-C₆)alkyl, cyano, or unsubstituted or substituted (C₁-C₆)alkoxy;

n is 0, 1, 2 or 3; and

R⁶ and R⁷ are independently H, substituted or unsubstituted (C₁-C₆)alkyl, a substituted or unsubstituted, partially or fully saturated (C₃-C₈)cycloalkyl, a substituted or unsubstituted, partially or fully saturated (C₃-C₈)heterocyclic ring, a substituted or unsubstituted aryl, a substituted or unsubstituted heteroaryl, or R⁶ and R⁷ taken together form a substituted or unsubstituted, partially or fully saturated, heterocyclic 3 to 8 membered ring; a prodrug thereof; or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

18. The compound of Claim 17 wherein R¹ and R⁵ are hydrogen and n is 0; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

19. The compound of Claim 18 wherein Ar is pyridyl; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

5

20. The compound of Claim 19 wherein said pyridyl is 3-pyridyl; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

10

21. The compound of Claim 20 wherein R^2 and R^3 are hydrogen; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

15

22. The compound of Claim 20 wherein R^2 and R^3 are methyl; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

20

23. The compound of Claim 20 wherein X is a covalent bond; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

25

24. The compound of Claim 20 wherein X is an oxygen; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

25. The compound of Claim 21 wherein X is a covalent bond; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

26. The compound of Claim 21 wherein X is an oxygen; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

5 27. The compound of Claim 22 wherein X is a covalent bond; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

10 28. The compound of Claim 18 wherein said Ar is a substituted phenyl, said substituted phenyl being a halogen substituted phenyl; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

15 29. The compound of Claim 28 wherein said halogen substituted phenyl is 3-chlorophenyl; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

20 30. The compound of Claim 29 wherein X is a covalent bond; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

25 31. The compound of Claim 29 wherein R^2 and R^3 are hydrogen; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

32. The compound of Claim 30 wherein R^2 and R^3 are hydrogen; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

33. The compound of Claim 30 wherein R² and R³ are methyl; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

- 5 34. A compound of claim 1 selected from the group consisting of
 N-[4-[2-[(2*R*)-2-(3-chlorophenyl)-2-hydroxyethyl]amino]-2-
 methylpropyl]phenyl]-1-piperidinesulfonamide;
 [4-[2-[(2*R*)-2-(3-chlorophenyl)-2-hydroxyethyl]amino]ethyl] -
 phenyl]trimethyl-sulfamide;
10 *N'*-[4-[2-[(2*R*)-2-(3-chlorophenyl)-2-hydroxyethyl]amino]ethyl]-
 phenyl]-*N,N*-dimethyl-sulfamide;
 N-[4-[2-[(2*R*)-2-(3-chlorophenyl)-2-hydroxyethyl]amino]ethyl]phenyl]-
 1-piperidinesulfonamide;
 N-[4-[2-[(2*R*)-2-(3-chlorophenyl)-2-hydroxyethyl]amino]ethyl]phenyl]-
15 *N*-cyclohexyl-sulfamide;
 N-[4-[2-[(2*R*)-2-(3-chlorophenyl)-2-hydroxyethyl]amino]ethyl]phenyl]-
 1-piperidinesulfonamide;
 N'-[4-[2-[(2*R*)-2-(3-chlorophenyl)-2-hydroxyethyl]amino]ethyl]-
 phenyl]-*N*-cyclohexyl-*N*-methyl-sulfamide;
20 *N*-(cyclopropylmethyl)-*N'*-[4-[2-[(2*R*)-2-hydroxy-2-(3-pyridinyl)ethyl]-
 amino]-2-methylpropyl]phenyl]-sulfamide;
 N-(1,1-dimethyl-2-phenylethyl)-*N'*-[4-[2-[(2*R*)-2-hydroxy-2-(3-
 pyridinyl)ethyl]amino]-2-methylpropyl]phenyl]-sulfamide;
 N-[4-[2-[(2*R*)-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]-
25 phenyl]-2,6-dimethyl-, (2*R*,6*S*)-4-morpholinesulfonamide;
 N-[4-[2-[(2*R*)-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-
 methylpropyl]phenyl]-4-methyl-1-piperidinesulfonamide;
 N-[4-[2-[(2*R*)-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]-
 phenyl]-3,5-dimethyl-, (3*R*,5*S*)-1-piperidinesulfonamide;
30 *N*-[4-[2-[(2*R*)-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-
 methylpropyl]phenyl]-4-phenyl-1-piperidinesulfonamide;

N-[4-[2-[[*(2R)*]-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]phenyl]-*N'*-[(1*S*)-1-phenylethyl]-sulfamide;

N-cyclohexyl-*N'*-[4-[2-[[*(2R)*]-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]phenyl]-sulfamide;

5 *N*-[4-[2-[[*(2R)*]-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]-phenyl]-octahydro-(4*aR*,8*aR*)-2(1*H*)-isoquinolinesulfonamide;

N-[4-[2-[[*(2R)*]-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]phenyl]-*N'*-phenyl-sulfamide;

10 *N'*-[4-[2-[[*(2R)*]-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]phenyl]-*N,N*-dimethyl-sulfamide;

N-(cyclohexylmethyl)-*N'*-[4-[2-[[*(2R)*]-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]phenyl]-sulfamide;

N-cyclopropyl-*N'*-[4-[2-[[*(2R)*]-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]phenyl]-sulfamide;

15 *N*-[4-[2-[[*(2R)*]-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]-phenyl]-3-methyl-3-phenyl-1-piperidinesulfonamide;

N-[4-[2-[[*(2R)*]-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]phenyl]-3,3-dimethyl-1-piperidinesulfonamide;

20 *N*-[4-[2-[[*(2R)*]-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]-phenyl]-2,3-dihydro-spiro[1*H*-indene-1,3'-piperidine]-1'-sulfonamide;

N-(cyclopropylmethyl)-*N'*-[4-[2-[[*(2R)*]-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]phenyl]-sulfamide;

N-[4-[2-[[*(2R)*]-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]-phenyl]-*N'*-[(1*R*,2*S*)-2-phenylcyclopropyl]-sulfamide;

25 *N*-(2,3-dihydro-1*H*-inden-1-yl)-*N'*-[4-[2-[[*(2R)*]-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]phenyl]-sulfamide;

N-(1*R*,2*S*,4*S*)-*endo*-bicyclo[2.2.1]hept-2-yl-*N'*-[4-[2-[[*(2R)*]-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]phenyl]-sulfamide;

30 *N*-[4-[2-[[*(2R)*]-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]phenyl]-*N'*-(2-methoxyethyl)-sulfamide;

20230207 09:59:00

N-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]-phenyl]-*N'*-[[*(2S)*-tetrahydro-2-furanyl]methyl]-sulfamide;

N-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]phenyl]-4-methyl-1-piperazinesulfonamide;

5 *N*-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]-phenyl]-4-(phenylmethyl)-1-piperazinesulfonamide;

N-cyclobutyl-*N'*-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]phenyl]-sulfamide;

10 *N*-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]phenyl]-1-piperazinesulfonamide;

N-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]-phenyl]-*N'*-[1-(phenylmethyl)-4-piperidinyl]-sulfamide;

N-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]-phenyl]-*N'*-[(3*S*)-1-(phenylmethyl)-3-pyrrolidinyl]-sulfamide;

15 *N*-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]-phenyl]-*N'*-[(1*S*,2*S*)-2-(phenylmethoxy)cyclopentyl]-sulfamide;

N'-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]ethyl]phenyl]-*N,N*-dimethyl-sulfamide;

20 *N*-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]ethyl]phenyl]-1-piperidinesulfonamide;

N-cyclohexyl-*N'*-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]ethyl]phenyl]-*N*-methyl-sulfamide;

N-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]ethyl]phenyl]-4-(phenylmethyl)-1-piperidinesulfonamide;

25 *N*-[4-[2-[[*(2R)*-2-Hydroxy-2-(3-pyridinyl)ethyl]amino]ethyl]phenyl]-4-methyl-1-piperidinesulfonamide;

N-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]ethyl]phenyl]-hexahydro-1*H*-azepine-1-sulfonamide;

30 *N*-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]ethyl]phenyl]-2,6-dimethyl-, (*2R*,6*S*)-4-morpholinesulfonamide;

20220713 13:55:58

N-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]ethyl]phenyl]-*N*-methyl-*N*-(2-phenylethyl)-sulfamide;

N-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]ethyl]phenyl]-*N*-methyl-*N*-(1-methylethyl)-sulfamide;

5 *N*-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]ethyl]phenyl]-3,4-dihydro-2(1*H*)-isoquinolinesulfonamide;

N-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]ethyl]phenyl]-2-(methoxymethyl)-, (2*S*)-1-pyrrolidinesulfonamide;

10 *N*-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]ethyl]phenyl]-3,5-dimethyl-, (3*R*,5*S*)-1-piperidinesulfonamide;

N-(2,3-dihydro-1*H*-inden-2-yl)-*N*'-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]ethyl]phenyl]-sulfamide;

N-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]ethyl]phenyl]-4-phenyl-1-piperidinesulfonamide;

15 *N*'-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]ethyl]phenyl]-*N*-methyl-*N*-phenyl-sulfamide;

4-(1,1-dimethylethyl)-*N*-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]ethyl]phenyl]-1-piperidinesulfonamide;

20 *N*-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]ethyl]phenyl]-octahydro-(4*aS*,8*aS*)-2(1*H*)-isoquinolinesulfonamide;

N-cyclohexyl-*N*'-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]ethyl]phenyl]-sulfamide;

3-cyclohexyl-*N*-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]ethyl]phenyl]-1-piperidinesulfonamide;

25 4-cyano-*N*-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]ethyl]phenyl]-4-phenyl-1-piperidinesulfonamide;

N-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]ethyl]phenyl]-3-[(4-methoxyphenyl)methyl]-1-pyrrolidinesulfonamide;

30 *N*-[(1*R*,2*S*,4*S*)-*endo*-bicyclo[2.2.1]hept-2-ylmethyl]-*N*'-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]phenyl]-sulfamide;

20220120 095900T

N-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]ethyl]phenyl]-5-methoxy-3,4-dihydro-spiro[naphthalene-1(2*H*),4'-piperidine]-1'-sulfonamide;

N-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]ethyl]phenyl]-1-(4-methylphenyl)-3-azabicyclo[3.1.0]hexane-3-sulfonamide;

5 *N*-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]ethyl]phenyl]-7-(trifluoromethyl)-1,2,4,5-tetrahydro-1,5-methano-3*H*-3-benzazepine-3-sulfonamide;

N-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]ethoxy]phenyl]-*N,N*-dimethyl-sulfamide; and

10 *N*-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]ethoxy]phenyl]-4-methyl-1-piperidinesulfonamide;

a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

15 35. A compound of claim 1 selected from the group consisting of *N*-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]phenyl]-2*R*,6*S*-dimethyl-4-morpholinesulfonamide;

N-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]ethyl]phenyl]-2(*S*)-(methoxymethyl)-1-pyrrolidinesulfonamide;

20 *N*-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]ethyl]phenyl]-3,5-dimethyl-, (3*R*,5*S*)-1-piperidinesulfonamide;

N-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]phenyl]-3,5-dimethyl-, (3*R*,5*S*)-1-piperidinesulfonamide;

25 *N*-cyclohexyl-*N*'-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]phenyl]-sulfamide;

N-cyclopropyl-*N*'-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]phenyl]-sulfamide;

N-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]phenyl]-3-methyl-3-phenyl-1-piperidinesulfonamide;

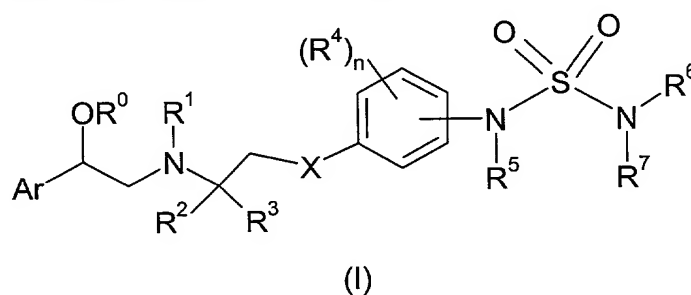
30 *N*-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]phenyl]-3,3-dimethyl-1-piperidinesulfonamide;

N-(cyclopropylmethyl)-*N'*-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]phenyl]-sulfamide; and

N-(1*R*,2*S*,4*S*)-*endo*-bicyclo[2.2.1]hept-2-yl-*N'*-[4-[2-[[*(2R)*-2-hydroxy-2-(3-pyridinyl)ethyl]amino]-2-methylpropyl]phenyl]-sulfamide;

- 5 a prodrug thereof; or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

36. A compound of Formula (IA)



wherein

Ar is an unsubstituted or substituted aryl, or an unsubstituted or substituted heteroaryl;

R⁰ and R¹ are hydrogen;

- 15 R², R³ and R⁵ are each independently H or (C₁-C₆)alkyl;

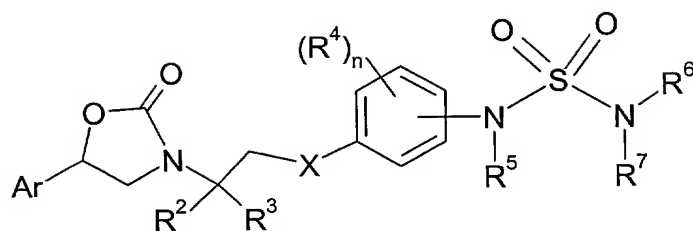
X is a covalent bond, O, S(O)_p, where p is 0, 1 or 2, or NR^{1a}, where R^{1a} is H or (C₁-C₆)alkyl;

R⁴ for each occurrence is independently halo, unsubstituted or substituted (C₁-C₆)alkyl, cyano, or unsubstituted or substituted (C₁-C₆)alkoxy;

- 20 n is 0, 1, 2, or 3; and

R⁶ and R⁷ are independently H, substituted or unsubstituted (C₁-C₆)alkyl, a substituted or unsubstituted, partially or fully saturated (C₃-C₈)cycloalkyl, a substituted or unsubstituted, partially or fully saturated (C₃-C₈)heterocyclic ring, a substituted or unsubstituted aryl, a substituted or unsubstituted heteroaryl, or R⁶ and R⁷ taken together form a substituted or unsubstituted, partially or fully saturated, heterocyclic 3 to 8 membered ring; prepared by deprotecting a compound of Formula (II)

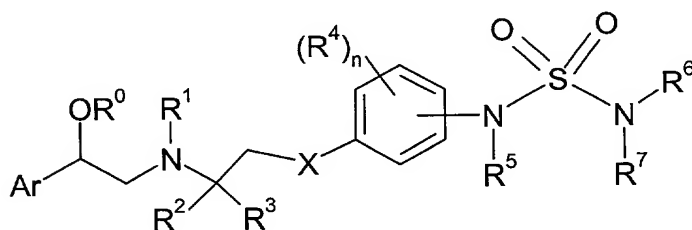
25



(II)

wherein R^2 , R^3 , R^4 , R^5 , R^6 , R^7 , Ar, X, and n are as defined above.

- 5 37. A compound of Formula (IA)

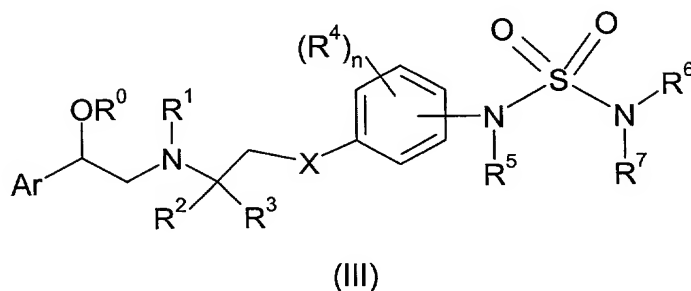


(I)

wherein

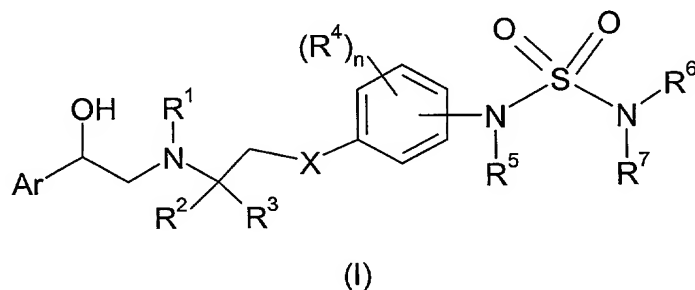
- Ar is an unsubstituted or substituted aryl, or an unsubstituted or
 10 substituted heteroaryl;
 R^0 and R^1 are hydrogen;
 R^2 , R^3 and R^5 are each independently H or (C_1-C_6) alkyl;
 X is a covalent bond, O, $S(O)_p$, where p is 0, 1 or 2, or NR^{1a} , where R^{1a}
 is H or (C_1-C_6) alkyl;
 15 R^4 for each occurrence is independently halo, unsubstituted or
 substituted (C_1-C_6) alkyl, cyano, or unsubstituted or substituted (C_1-C_6) alkoxy;
 n is 0, 1, 2, or 3; and
 R^6 and R^7 are independently H, substituted or unsubstituted $(C_1-$
 $C_6)$ alkyl, a substituted or unsubstituted, partially or fully saturated $(C_3-$
 20 $C_8)$ cycloalkyl, a substituted or unsubstituted, partially or fully saturated (C_3-C_8)
 heterocyclic ring, a substituted or unsubstituted aryl, a substituted or
 unsubstituted heteroaryl, or R^6 and R^7 taken together form a substituted or
 unsubstituted, partially or fully saturated, heterocyclic 3 to 8 membered ring;

prepared by deprotecting a compound of Formula (III)



- 5 wherein R^0 is a hydroxy-protecting group; R^1 is H or an amino-protecting group; and R^2 , R^3 , R^4 , R^5 , R^6 , R^7 , Ar, X, and n are as defined above.

38. A method of treating a β_3 adrenergic receptor-mediated disease, condition, or disorder in an animal in need of such treatment comprising the
 10 step of administering to said animal a therapeutically effective amount of a compound of Formula (I)

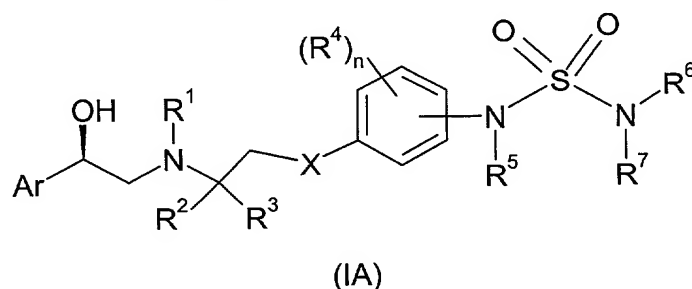


wherein

- 15 Ar is an unsubstituted or substituted aryl, or an unsubstituted or substituted heteroaryl;
 R^1 , R^2 , R^3 and R^5 are each independently H or (C_1-C_6) alkyl;
 X is a covalent bond, O, $S(O)_p$, where p is 0, 1 or 2, or NR^{1a} , where R^{1a} is H or (C_1-C_6) alkyl;
 20 R^4 for each occurrence is independently halo, unsubstituted or substituted (C_1-C_6) alkyl, cyano, or unsubstituted or substituted (C_1-C_6) alkoxy;
 n is 0, 1, 2, or 3; and

R^6 and R^7 are independently H, substituted or unsubstituted (C_1 - C_6)alkyl, a substituted or unsubstituted, partially or fully saturated (C_3 - C_8)cycloalkyl, a substituted or unsubstituted, partially or fully saturated (C_3 - C_8)heterocyclic ring, a substituted or unsubstituted aryl, a substituted or unsubstituted heteroaryl, or R^6 and R^7 taken together form a substituted or unsubstituted, partially or fully saturated, heterocyclic 3 to 8 membered ring; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

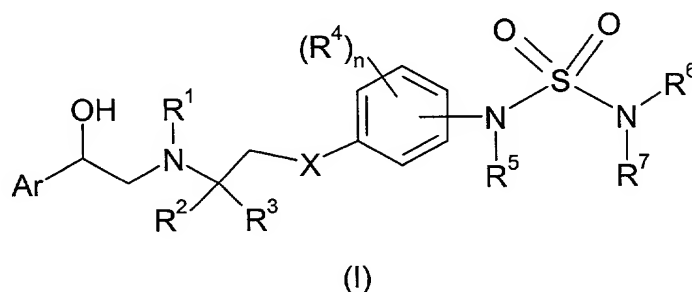
39. The method of Claim 38 wherein said compound of Formula (I) is a compound of Formula (IA)



wherein R^1 , R^2 , R^3 , R^4 , R^5 , R^6 , R^7 , Ar, X, and n are as defined in Claim 36; a prodrug thereof, or a pharmaceutically acceptable salt, hydrate or solvate of said compound or said prodrug.

40. The method of Claim 38 or 39 wherein said β_3 adrenergic receptor-mediated disease, condition, or disorder is selected from the group consisting of obesity, diabetes, irritable bowel syndrome, inflammatory bowel disease, esophagitis, duodenitis, Crohn's Disease, proctitis, asthma, intestinal motility disorder, ulcer, gastritis, hypercholesterolemia, cardiovascular disease, urinary incontinence, depression, prostate disease, dyslipidemia, and airway inflammatory disorder.

41. A method of increasing lean meat content in an edible animal comprising the step of administering to said edible animal a lean meat increasing amount of a compound of Formula (I)



wherein

Ar is an unsubstituted or substituted aryl, or an unsubstituted or substituted heteroaryl;

R^1 , R^2 , R^3 and R^5 are each independently H or (C₁-C₆)alkyl;

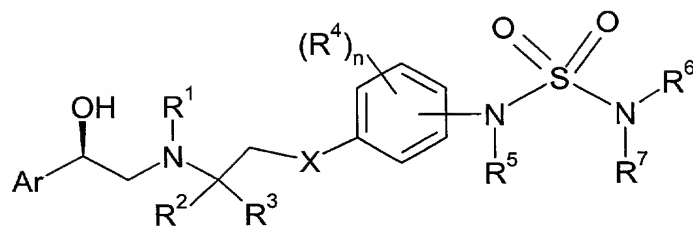
X is a covalent bond, O, S(O)_p, where p is 0, 1 or 2, or NR^{1a}, where R^{1a} is H or (C₁-C₆)alkyl;

R^4 for each occurrence is independently halo, unsubstituted or substituted (C₁-C₆)alkyl, cyano, or unsubstituted or substituted (C₁-C₆)alkoxy;

n is 0, 1, 2, or 3; and

R^6 and R^7 are independently H, substituted or unsubstituted (C₁-C₆)alkyl, a substituted or unsubstituted, partially or fully saturated (C₃-C₈)cycloalkyl, a substituted or unsubstituted, partially or fully saturated (C₃-C₈)heterocyclic ring, a substituted or unsubstituted aryl, a substituted or unsubstituted heteroaryl, or R^6 and R^7 taken together form a substituted or unsubstituted, partially or fully saturated, heterocyclic 3 to 8 membered ring; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

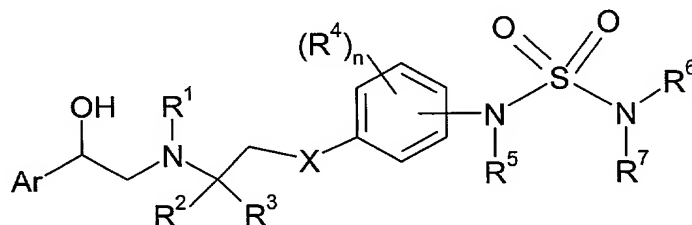
42. The method of Claim 41 wherein said compound of Formula (I) is a compound of Formula (IA)



(IA)

wherein R^1 , R^2 , R^3 , R^4 , R^5 , R^6 , R^7 , Ar, X, and n are as defined in Claim 39; a
 prodrug thereof, or a pharmaceutically acceptable salt, hydrate or solvate of
 5 said compound or said prodrug.

43. A pharmaceutical composition comprising
 (a) a pharmaceutically acceptable carrier, vehicle, diluent or mixture
 thereof; and
 10 (b) a compound of Formula (I)



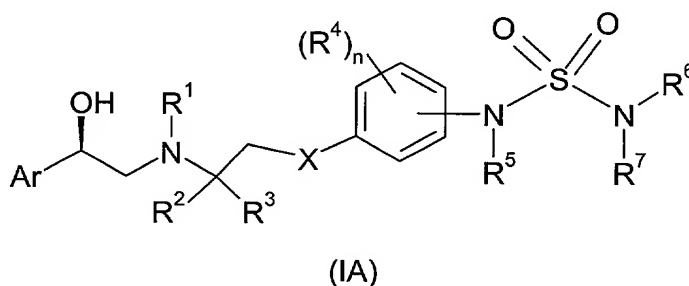
(I)

wherein

- Ar is an unsubstituted or substituted aryl, or an unsubstituted or
 15 substituted heteroaryl;
 R^1 , R^2 , R^3 and R^5 are each independently H or (C_1-C_6) alkyl;
 X is a covalent bond, O, $S(O)_p$, where p is 0, 1 or 2, or NR^{1a} , where R^{1a}
 is H or (C_1-C_6) alkyl;
 R^4 for each occurrence is independently halo, unsubstituted or
 20 substituted (C_1-C_6) alkyl, cyano, or unsubstituted or substituted (C_1-C_6) alkoxy;
 n is 0, 1, 2, or 3; and
 R^6 and R^7 are independently H, substituted or unsubstituted $(C_1-$
 $C_6)$ alkyl, a substituted or unsubstituted, partially or fully saturated $(C_3-$

C₈)cycloalkyl, a substituted or unsubstituted, partially or fully saturated (C₃-C₈) heterocyclic ring, a substituted or unsubstituted aryl, a substituted or unsubstituted heteroaryl, or R⁶ and R⁷ taken together form a substituted or unsubstituted, partially or fully saturated, heterocyclic 3 to 8 membered ring;
5 a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug.

44. The composition of Claim 43 wherein said compound of Formula (I) is a compound of Formula (IA)



wherein R¹, R², R³, R⁴, R⁵, R⁶, R⁷, Ar, X, and n are as defined in Claim 41; a prodrug thereof, or a pharmaceutically acceptable salt, hydrate or solvate of said compound or said prodrug.

45. The composition of Claim 43 further comprising an anti-obesity agent.

46. The composition of Claim 44 further comprising an anti-obesity agent.

47. The composition of claim 45 or 46 wherein said anti-obesity agent is selected from the group consisting of an apo-B/MTP inhibitor, an MCR-4 agonist, a CCK-A agonist, a monoamine reuptake inhibitor, a sympathomimetic agent, a serotonergic agent, a dopamine agonist, a melanocyte-stimulating hormone receptor analog, a cannabinoid receptor antagonist, a melanin concentrating hormone antagonist, leptin, a leptin

analog, a leptin receptor agonist, a galanin antagonist, a lipase inhibitor, a bombesin agonist, a Neuropeptide-Y antagonist, a thyromimetic agent, dehydroepiandrosterone or an analog thereof, a glucocorticoid receptor agonist or antagonist, an orexin receptor antagonist, a urocortin binding
5 protein antagonist, a glucagon-like peptide-1 receptor agonist, a ciliary neurotrophic factor, and an AGRP.

48. The composition according to claim 45 or 46 wherein said anti-obesity agent is selected from the group consisting of phentermine,
10 ephedrine, leptin, phenylpropanolamine, and pseudoephedrine; said monoamine reuptake inhibitor is sibutramine; said dopamine agonist is bromocriptine; and said lipase inhibitor is orlistat.

49. A method of treating a β_3 adrenergic receptor-mediated disease,
15 condition, or disorder in an animal in need of such treatment comprising the step of administering to said animal a therapeutically effective amount of a composition of claim 43.

50. A method of treating a β_3 adrenergic receptor-mediated disease,
20 condition, or disorder in an animal in need of such treatment comprising the step of administering to said animal a therapeutically effective amount of a composition of claim 44.

51. A method of treating a β_3 adrenergic receptor-mediated disease,
25 condition, or disorder in an animal in need of such treatment comprising the step of administering to said animal a therapeutically effective amount of a composition of claim 45.

52. A method of treating a β_3 adrenergic receptor-mediated disease,
30 condition, or disorder in an animal in need of such treatment comprising the

2022.03.20 08:55:00

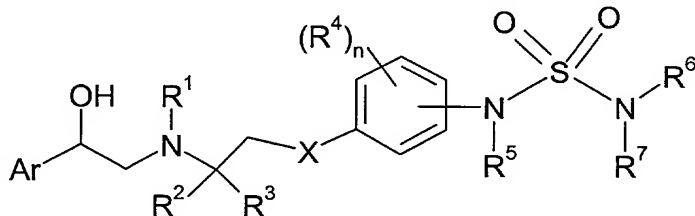
step of administering to said animal a therapeutically effective amount of a composition of claim 46.

53. The method of claim 49, 50, 51 or 52 wherein said β_3 adrenergic receptor-mediated disease, condition, or disorder is selected from the group consisting of obesity, diabetes, irritable bowel syndrome, inflammatory bowel disease, esophagitis, duodenitis, Crohn's Disease, proctitis, asthma, intestinal motility disorder, ulcer, gastritis, hypercholesterolemia, cardiovascular disease, urinary incontinence, depression, prostate disease, dyslipidemia, and airway inflammatory disorder.

54. The method of claim 51 or 52 wherein said anti-obesity agent is selected from the group consisting of an apo-B/MTP inhibitor, an MCR-4 agonist, a CCK-A agonist, a monoamine reuptake inhibitor, a sympathomimetic agent, a serotonergic agent, a dopamine agonist, a melanocyte-stimulating hormone receptor analog, a cannabinoid receptor antagonist, a melanin concentrating hormone antagonist, leptin, a leptin analog, a leptin receptor agonist, a galanin antagonist, a lipase inhibitor, a bombesin agonist, a Neuropeptide-Y antagonist, a thyromimetic agent, dehydroepiandrosterone or an analog thereof, a glucocorticoid receptor agonist or antagonist, an orexin receptor antagonist, a urocortin binding protein antagonist, a glucagon-like peptide-1 receptor agonist, a ciliary neurotrophic factor, and an AGRP.

55. A pharmaceutical kit comprising

(a) a suitable dosage form comprising a compound of Formula (I)



(I)

wherein

Ar is an unsubstituted or substituted aryl, or an unsubstituted or substituted heteroaryl;

5 R^1 , R^2 , R^3 and R^5 are each independently H or (C₁-C₆)alkyl;

X is a covalent bond, O, S(O)_p, where p is 0, 1 or 2, or NR^{1a}, where R^{1a} is H or (C₁-C₆)alkyl;

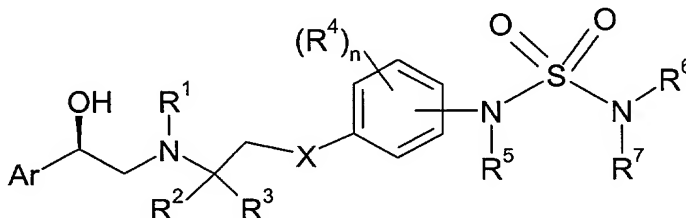
R^4 for each occurrence is independently halo, unsubstituted or substituted (C₁-C₆)alkyl, cyano, or unsubstituted or substituted (C₁-C₆)alkoxy;

10 n is 0, 1, 2, or 3; and

R^6 and R^7 are independently H, substituted or unsubstituted (C₁-C₆)alkyl, a substituted or unsubstituted, partially or fully saturated (C₃-C₈)cycloalkyl, a substituted or unsubstituted, partially or fully saturated (C₃-C₈)heterocyclic ring, a substituted or unsubstituted aryl, a substituted or unsubstituted heteroaryl, or R^6 and R^7 taken together form a substituted or unsubstituted, partially or fully saturated, heterocyclic 3 to 8 membered ring; a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug; and

15 (b) instructions describing a method of using the dosage form to treat or prevent a β_3 adrenergic receptor-mediated disease, condition, or disorder.

56. The kit of Claim 55 wherein said compound of Formula (I) is a compound of Formula (IA)



(IA)

25

wherein R^1 , R^2 , R^3 , R^4 , R^5 , R^6 , R^7 , Ar, X, and n are as defined in Claim 53; a prodrug thereof, or a pharmaceutically acceptable salt, hydrate or solvate of said compound or said prodrug.

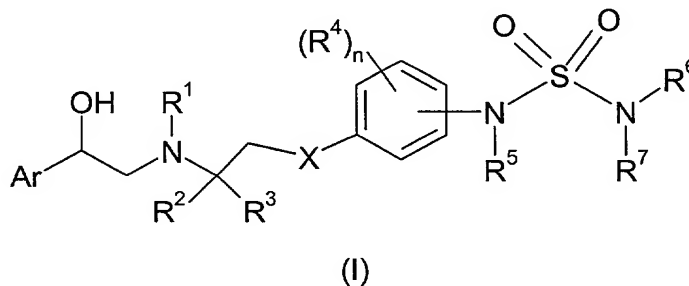
5 57. A method of increasing lean meat content in an edible animal comprising the step of administering to said edible animal a lean meat increasing amount of a pharmaceutical composition of Claim 43.

10 58. A method of increasing lean meat content in an edible animal comprising the step of administering to said edible animal a lean meat increasing amount of a pharmaceutical composition of Claim 44.

15 59. A method of increasing lean meat content in an edible animal comprising the step of administering to said edible animal a lean meat increasing amount of a pharmaceutical composition of Claim 45.

20 60. A method of increasing lean meat content in an edible animal comprising the step of administering to said edible animal a lean meat increasing amount of a pharmaceutical composition of Claim 46.

61. A pharmaceutical kit comprising
(a) a first unit dosage form comprising
(i) a compound of Formula (I)



wherein

Ar is an unsubstituted or substituted aryl, or an unsubstituted or substituted heteroaryl;

R^1 , R^2 , R^3 and R^5 are each independently H or (C₁-C₆)alkyl;

X is a covalent bond, O, S(O)_p, where p is 0, 1 or 2, or NR^{1a}, where R^{1a} is H or (C₁-C₆)alkyl;

R^4 for each occurrence is independently halo, unsubstituted or substituted (C₁-C₆)alkyl, cyano, or unsubstituted or substituted (C₁-C₆)alkoxy;

n is 0, 1, 2, or 3; and

R^6 and R^7 are independently H, substituted or unsubstituted (C₁-C₆)alkyl, a substituted or unsubstituted, partially or fully saturated (C₃-C₈)cycloalkyl, a substituted or unsubstituted, partially or fully saturated (C₃-C₈) heterocyclic ring, a substituted or unsubstituted aryl, a substituted or unsubstituted heteroaryl, or R^6 and R^7 taken together form a substituted or unsubstituted, partially or fully saturated, heterocyclic 3 to 8 membered ring;

a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug; and

(ii) a pharmaceutically acceptable carrier, excipient or diluent;

b) a second dosage form comprising

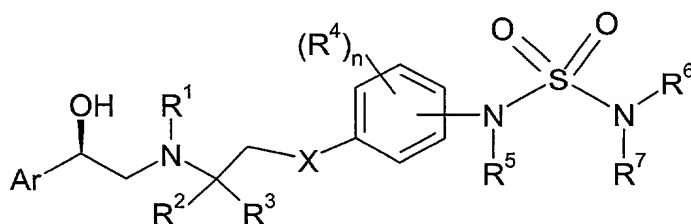
(i) at least one anti-obesity agent selected from the group consisting of an apo-B/MTP inhibitor, an MCR-4 agonist, a CCK-A agonist, a monoamine reuptake inhibitor, a sympathomimetic agent, a serotonergic agent, a dopamine agonist, a melanocyte-stimulating hormone receptor analog, a cannabinoid receptor antagonist, a

melanin concentrating hormone antagonist, leptin, a
 leptin analog, a leptin receptor agonist, a galanin
 antagonist, a lipase inhibitor, a bombesin agonist, a
 Neuropeptide-Y antagonist, a thyromimetic agent,
 dehydroepiandrosterone or an analog thereof, a
 glucocorticoid receptor agonist or antagonist, an orexin
 receptor antagonist, a urocortin binding protein
 antagonist, a glucagon-like peptide-1 receptor agonist, a
 ciliary neurotrophic factor, and an AGRP; and

(ii) a pharmaceutically acceptable carrier, excipient or
 diluent; and

c) a container.

62. The kit of Claim 61 wherein said compound of Formula (I) is a
 compound of Formula (IA)

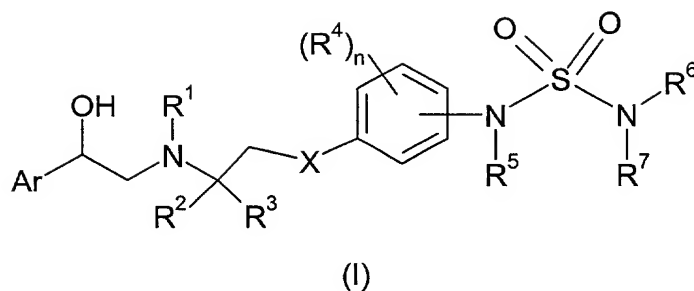


(IA)

wherein R^1 , R^2 , R^3 , R^4 , R^5 , R^6 , R^7 , Ar, X, and n are as defined in Claim 59; a
 prodrug thereof, or a pharmaceutically acceptable salt, hydrate or solvate of
 said compound or said prodrug.

63. A method for treating a β_3 adrenergic receptor-mediated
 disease, condition, or disorder comprising administering to an animal in
 need of such treatment

a) a therapeutically effective amount of a compound of Formula (I)



wherein

Ar is an unsubstituted or substituted aryl, or an unsubstituted or substituted heteroaryl;

R^1 , R^2 , R^3 and R^5 are each independently H or (C₁-C₆)alkyl;

X is a covalent bond, O, S(O)_p, where p is 0, 1 or 2, or NR^{1a}, where R^{1a} is H or (C₁-C₆)alkyl;

R^4 for each occurrence is independently halo, unsubstituted or substituted (C₁-C₆)alkyl, cyano, or unsubstituted or substituted (C₁-C₆)alkoxy;

n is 0, 1, 2, or 3; and

R^6 and R^7 are independently H, substituted or unsubstituted (C₁-C₆)alkyl, a substituted or unsubstituted, partially or fully saturated (C₃-C₈)cycloalkyl, a substituted or unsubstituted, partially or fully saturated (C₃-C₈) heterocyclic ring, a substituted or unsubstituted aryl, a substituted or unsubstituted heteroaryl, or R^6 and R^7 taken together form a substituted or unsubstituted, partially or fully saturated, heterocyclic 3 to 8 membered ring;

a prodrug thereof, or a pharmaceutically acceptable salt, solvate or hydrate of said compound or said prodrug; and

b) a therapeutically effective amount of at least one anti-obesity agent selected from the group consisting of an apo-B/MTP inhibitor, an MCR-4 agonist, a CCK-A agonist, a monoamine reuptake inhibitor, a sympathomimetic agent, a

serotonergic agent, a dopamine agonist, a melanocyte-stimulating hormone receptor analog, a cannabinoid receptor antagonist, a melanin concentrating hormone antagonist, leptin, a leptin analog, a leptin receptor agonist, a galanin antagonist, a lipase inhibitor, a bombesin agonist, a Neuropeptide-Y antagonist, a thyromimetic agent, dehydroepiandrosterone or an analog thereof, a glucocorticoid receptor agonist or antagonist, an orexin receptor antagonist, a urocortin binding protein antagonist, a glucagon-like peptide-1 receptor agonist, a ciliary neurotrophic factor, and an AGRP.

64. The method of Claim 63 wherein said compound of Formula (I), prodrug thereof, or pharmaceutially acceptable salt, hydrate or solvate of said compound or said prodrug, and said anti-obesity agent is administered simultaneously.

65. The method of Claim 63 wherein said compound of Formula (I), prodrug thereof, or pharmaceutially acceptable salt, hydrate or solvate of said compound or said prodrug, and said anti-obesity agent is administered sequentially.

66. The method of Claim 63 wherein said compound of Formula (I), prodrug thereof, or pharmaceutially acceptable salt, hydrate or solvate of said compound or said prodrug, and said anti-obesity agent is administered as a single pharmaceutical composition comprising said compound of Formula (I), prodrug thereof, or pharmaceutially acceptable salt, hydrate or solvate of said compound or said prodrug, said anti-obesity agent, and a pharmaceutically acceptable excipient, diluent, carrier or mixtures thereof.

20250902 1006593.0230

67. The method of Claim 63 wherein said compound of Formula (I), prodrug thereof, or pharmaceutially acceptable salt, hydrate or solvate of said compound or said prodrug, and said anti-obesity agent is administered as two separate pharmaceutical compositions comprising (i) a first
5 composition comprising said compound of Formula (1), prodrug thereof, or pharmaceutially acceptable salt, hydrate or solvate of said compound or said prodrug and a pharmaceutically acceptable excipient, diluent, carrier or mixtures thereof; and (ii) a second composition comprising said anti-obesity agent and a pharmaceutically acceptable excipient, diluent, carrier or
10 mixtures thereof.

68. The method of Claim 67 wherein said first composition and said second composition is administered simultaneously.

15 69. The method of Claim 67 wherein said first composition and said second composition is administered sequentially.

20220929 085930